ZEROCO2 - PROMOTION OF NEAR ZERO CO2 EMISSION BUILDINGS DUE TO ENERGY USE

"Greening the building sector through enhancement of various eco-friendly energy, technologies, services and business models."

Energy transition of buildings - an opportunity

The EPBD directive proposes that after 2020 all new buildings must be zero energy buildings and those buildings will also be Near zero CO2 emission buildings due to energy use (NZCO2EB). Although there has been much recent focus on measures to reduce the emissions from new buildings, the existing building stock remains largely untouched and many refurbishment projects miss opportunities to reduce emissions and deliver low CO2 buildings. ZERCO2 will define near zero CO2 emission buildings due to energy use (NZCO2EB) and present the various benefits which result from this type of building. Through interregional cooperation, regions will identify, share and transfer innovative methodologies, technologies, processes and good practices in developing and implementing Near zero CO2 emission buildings due to energy use policies, targeting new constructions or retrofitting existing buildings.

Second project partners in Berlin

The partners presented their regional Study report regarding the use of Renewable Energy Sources (RES). The Maltese partners (UOM) also presented the report for Malta. An interesting point is the high reliance on the use of biomass sources to meet RES targets for most of the partners in the ZERCO2 project. In addition, Crete which has a similar climate as Malta, has a higher contribution of renewable energy from solar water heating than from photovoltaics, unlike the scenario in Malta. A case study of a NZCO2EB building in Malta for which a boutique hotel was studied was also presented. It was shown that the hotel's main consumption is for hot water and that a 75 % reduction in $\rm CO_2$ emissions for the hotel versus a reference scenario is possible. This reduction in emissions is mainly achieved by the installation of PVs on the roof & façade, and by the replacement of electric water heaters with air to water heat pumps. The resulting payback period is approximately 9 years.

Project duration: Apr. 2016 – Mar. 2020

ERDF Funds: 1,227,957.00

News:

The second project partners meeting was held in Berlin, Germany and was organised by the EIFI from 13th to 16th September 2016.



The first stakeholders meeting was organised in September at UOM Valletta campus in order to involve the stakeholders to the project and to present the first results.



The second stakeholders meeting was organised in November at UOM ISE, Marsaxlokk in order to discuss/analyse and perform a SWOT analysis of the policies supporting renewable energy and energy efficiency in Malta.



Case study of a boutique hotel in Malta to NZCO2EB has been uploaded on youtube:

https://www.youtube.com/wat ch?v=GtV-QUtoVxc

Upcoming events:

A regional workshop will be organised in February 2017, during the Malta Presidency of the EU period (Jan. - Jun 2017).





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First stakeholders meeting

The first stakeholders meeting took place on the 9th of September invited and attended the meeting including the Energy and Water Agency and the Buildings Regulations office. A memorandum of understanding was signed with these two entities for this project. A brief review of the ZEROCO2 project aims were presented including the presentations given in the second projects partners in Berlin which were critically discussed.

Second stakeholders meeting and way forward

The second stakeholders meeting took place on the 24th of stakeholders attended the meeting. The aim of this meeting was to analyse the policies supporting energy efficiency and renewable sources in Malta. A SWOT analysis was carried out, by first identifying the drivers, barriers and opportunities in retrofitting of public buildings to NZCO2EB and then identifying overcome and the drivers and opportunities strengthened. The which of the various policies should be given priority to aid in the transition to NZCO2EB. Based on the second stakeholders meeting a regional policy report will be published. A regional workshop will be organised in February 2017 for which the public is invited to attend. Details about the event will follow and will be available on the social media.

For more information:

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Project Partners:

Lead Partner: 1. LOCAL ENERGY AGENCY SPODNJE PODRAVJE (Slovenja)



- 2. MEDITERRANEAN AGRONOMIC INSTITUTE OF CHANIA (Grecja)





- 4. MUNICIPALITY OF KAUNAS DISTRICT (Litwanja)
- 5. EUROPEAN INSTITUTE FOR INNOVATION (Germania)



- 6. THERMOPOLIS LTD. (Finlandja) Thermopolis
- 7. AGENCY FOR SUSTAINABLE MEDITERRANEAN CITIES AND TERRITORIES (Franza)



8. UNIVERSITY OF MALTA (Malta)







